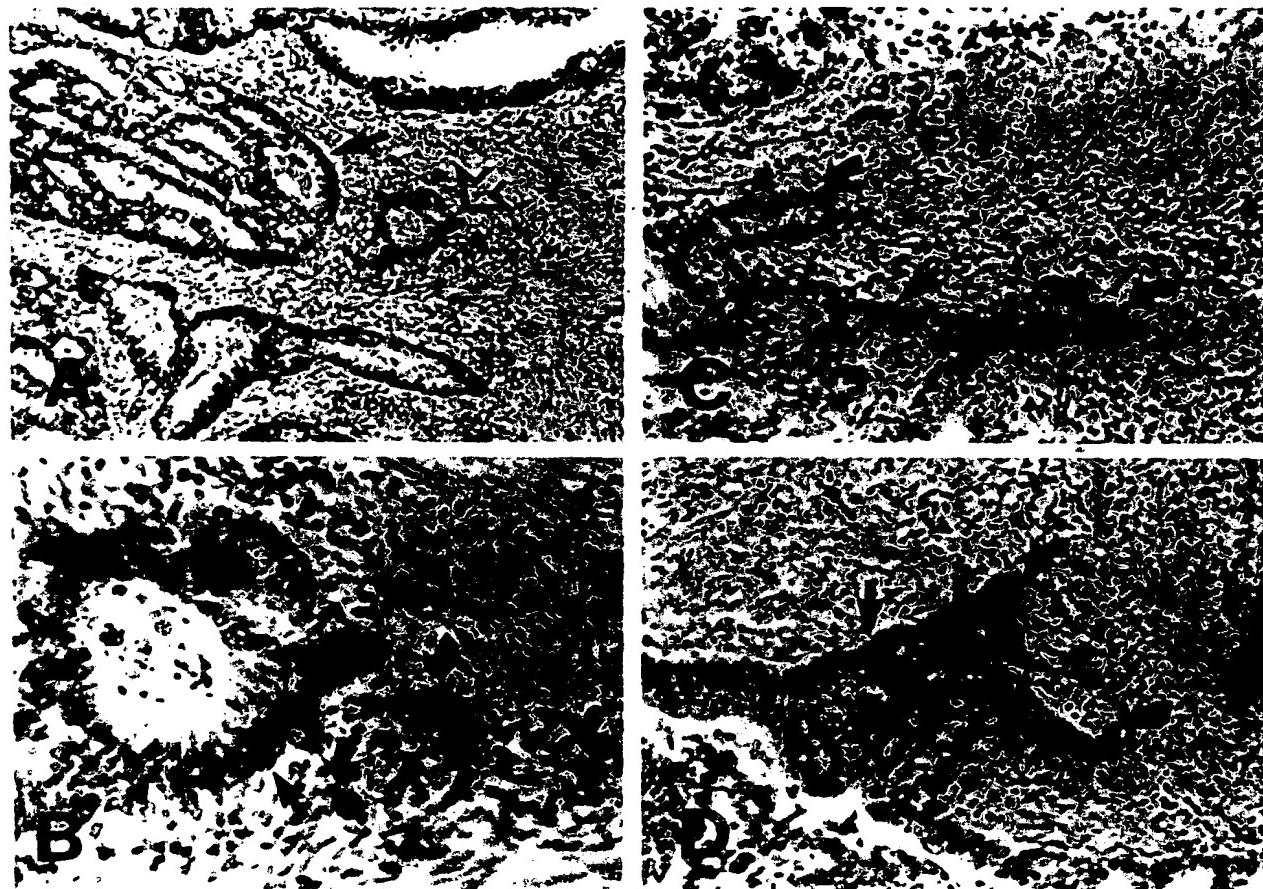


FIG. 1



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FIG. 2

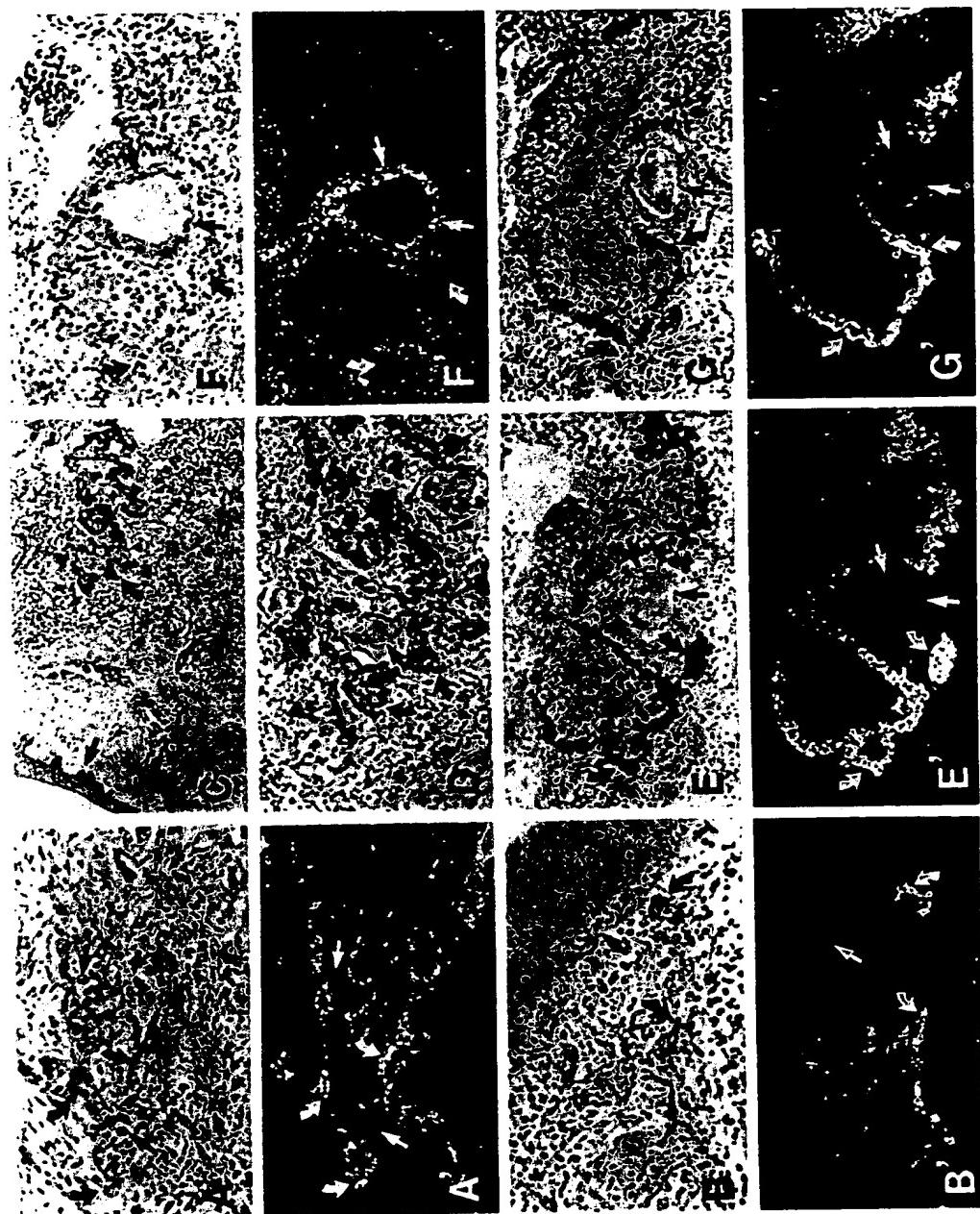


FIG. 3

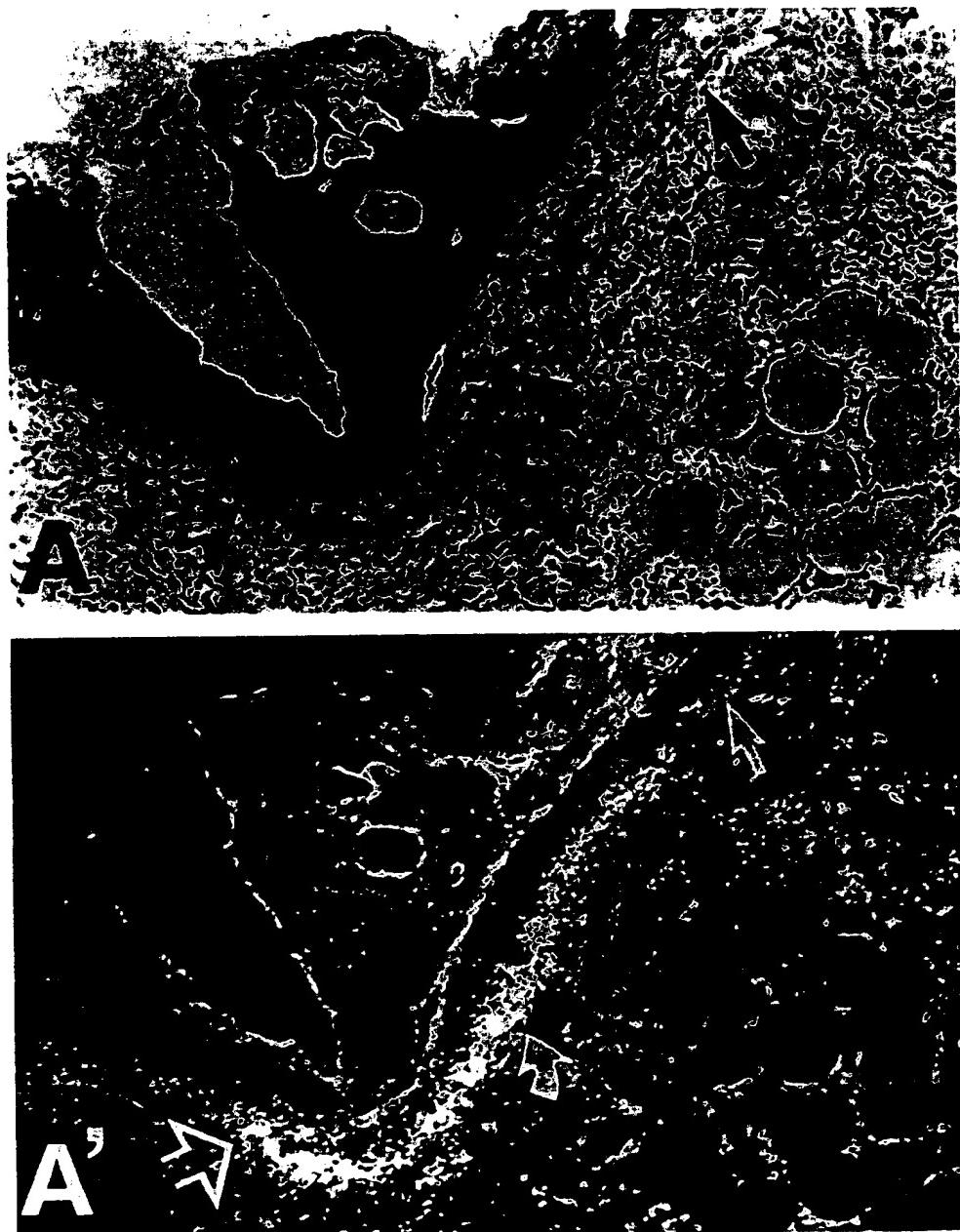


FIG 4A (SEQ ID NO.:12 & 13)

1 gaccaccta tcgaaggaaa aggaaggcac agcggagcgc agagtgagaa ccaccaaccg
61 aggcccccggg cagcgacccc tgcagcggag acagagactg agcggccgg caccgcctg
1
121 cctgcgtctt ggctgggctg ctgcctctgc ttctcgctcc ttctgccccgc agccccggcs
2 P A L W L G C C L C F S L L L P A A R A
181 acctccagga gggaaagtctg tgattgcaat gggaaagtcca ggcagtgtat ctttgatcgg
22 T S R R E V C D C N G K S .R Q C I F D R
!⇒ Domain V
241 qaacttcaca gacaaactgg taatggattc cgctgcetca actgcaatga caacactgt
42 E L H R Q T G N G F R C L N C N D N T D
301 ggcattcaact gcgagaagtg caagaatggc ttttacccggc acagagaaaag ggaccgcgt
62 G I H C E K C K N G F Y R H R E R D R C
361 ttgcctctgca attgttaactc caaagggtctt cttagtgcctc gatgtgaccaa ctctggacgg
82 L P C N C N S K G S L S A R C D N S G R
421 tgcagctgtta aaccagggtgt gataggagcc agatgcgacc gatgtctgcc aggcttccac
102 C S C K P G V T G A R C D R C L P G F H
481 atgcctcacgg atgcgggggtg caccsaagac cagagactgc tagactccaa gtgtgactgt
122 M L T D A G C T Q D Q R L L D S K C D C
541 gaccctgtg gcatcgcagg gcccctgtgac gcggggccgt gtgtctgcaaa gccagctgt
142 D P A G I A G P C D A G R C V C K P A V
601 actggagaac gctgtgatag gtgtcgatca ggttactata atctggatgg ggggaaacct
162 T G E R C D R C R S G Y Y N L D G G N P
661 gagggctgtta cccagtgttt ctgctatggg catteagcca gtcggcgcag ctctgcagaa
182 E G C T Q C F C Y G H S A S C R S S A E
!⇒ Domain IV
721 tacagtgtcc ataagatcac ctctacccctt catcaatgtt ttgtatggctg gaaggctgtc
202 Y S V H K I T S T F H Q D V D G W K A V
781 caacgaaatg ggtctccctgc aaagctccaa tggtcacagc gccatcaaga tgggttttagc
222 Q R N G S P A K L Q W S Q R H Q D V F S
841 tcagccccaaac gactagatcc tggctatttt gtggctccgt ccaaattttt tgggatcaa
242 S A Q R L D P V Y F V A P A K F L G N Q
901 caggtgagct atggggcaaaag cctgtccctt gactaccgtg tggacagagg aggcagacac
262 V S Y G Q S L S F D Y R V D R G G R H
961 ccacatgtccc atgatgtgtat cctggaaagggt gctggctcac ggatcacagc tcccttgatg
282 P S A H D V I L E G A G L R I T A P L M
1021 ccacccggca agacactgccc ttgtgggtcc accaagactt acacattca gttaaatgag
302 P L G K T L P C G L T K T Y T F R L N E
1081 catccaagca ataattggag cccccagctg agtactttt agtactgaaag gttactgcgg
322 H P S N N W S P Q L S Y F E Y R R L L R
1141 aatccacac ccctccgcata ccggactaca tatggagaat acagtactgg gtacattgac
342 N L T A L R I R A T Y G E Y S T G Y I D
1201 aatgtgaccc tgatccgc ccccccgtc tctggagccc cagcaccctg ggttgaacag
362 N V T L I S A R P V S G A P A P W V E Q
1261 tggatgttc ctgttgggta caaggggcaa ttctggccagg attgtcttc tggctacaag
382 C I C P V G Y K G Q F C Q D C A S G Y K
!⇒ Domain III
1321 agagattcag cgagactggg gcctttggc acctgtatcc ttgtactg tcaaggggg
402 R D S A R L G P F G T C I P C N C Q G G
1381 gggccctgtg atccagacac aggagattgt tattcagggg atgagaatcc tgacattgag
422 G A C D P D T G D C Y S G D E N P D I E
1441 tggctgact gcccattgg ttctacaac gatccgcacg accccccgcag ctgcaagcca
442 C A D C P I G F Y N D P H D P R S C K P
1501 tggccctgtc ataacgggtt cagctgttca gtgatccgg agacggagga ggtgggtgtgc
462 C P C H N G F S C S V I P E T E E V V C

FIG 4B

(SEQ ID NO.:12 & 13)

1561 aataactgcc cttccccgggtt cacccggtgccc cgcgtggagc tctgtgttga tggctacttt
 482 N N C P P G V T G A R C E L C A D G ? ?
 1621 ggggacccct ttggtaaca tggcccaagtg aggcccttgc agccctgtca atgcaacagc
 502 G D P F G E H G P V R P C Q P C Q C N S
 1681 aatgtggacc ccagtgcctc tggaaattgtt gacccggctga caggcagggtt ttgtaaatgt
 522 N V D P S A S G N C D R L T G R C L K C
 1741 atccacaaca cagccggcat ctactgcgac cagtgc当地 caggctactt cgccggaccca
 542 I H N T A G I Y C D Q C K A G Y F G D P
 1801 ttggcttcca accccagcaga caagtgtcga gtttgc当地 gtaacccat gggctcagag
 562 L A P N P A D K C R A C N C N P M G S E
 1861 cctgttaggt gtc当地 gtttgc当地 caggatttgg tgccccaac
 582 P V G C R S D G T V C K P G F G G P N
 1921 tgtgagcatg gaggccatcg ctgtccagct tgctataatc aagtgaagat tcagatggat
 602 C E H G A F S C P A C Y N Q V K I Q M D
 ↳ Domain I/I

1981 cagtttatgc agcagcttca gagaatggag qccctgtattt caaaggtca ggtgggtgat
 622 Q F M Q Q L Q R M E A L I S K A Q G G D
 2041 ggagtagtac ctgatacaga gctggaaaggc aggatgcagc aggctgagca ggccttcag
 642 G V V P D T E L E G R M Q Q A E Q A L Q
 2101 gacattctga gagatgccc gatttc当地 ggtgcttagca gatcccttgg tctccagttg
 662 D I L R D A Q I S E G A S R S L G L Q L
 2161 gccaagggtg gggccaaaga gaacagctac cagagccggc tggatgaccc caagatgact
 682 A K V R S Q E N S Y Q S R L D D L K M T
 2221 gtggaaagag ttccggctct gggaaagtcag taccagaacc gagttccggta tactcacagg
 702 V E R V R A L G S Q Y Q N R V R D T H R
 2281 ctcatcaactc agatgc当地 gagctggca gaaagtgaag cttcccttggg aaacactaac
 722 L I T Q M Q L S L A E S E A S L G N T N
 2341 attccctgcct cagaccacta cgtggggcca aatggcttca aaagtctggc tcaggaggcc
 742 I P A S D H Y V G P N G F K S L A Q E A
 2401 acaagattag cagaaaggca cgttgc当地 gccagtaaca tggagaact gacaaggaa
 762 T R L A E S H V E S A S N M E Q L T R E
 2461 actgaggact attccaaaca aeccttca ctgggtgc当地 aggccttgc当地 tgaaggagtc
 782 T E D Y S K Q A L S L V R K A L H E G V
 2521 ggaagcggaa gcggtagccc ggacgggtgtt gtgggtcaag ggcttgggaaaattggag
 802 G S G S G S P D G A V V Q G L V E K L E
 2581 aaaaccaagt ccctggccca gcaggtaaca aaggaggccca ctcaagcggaa aattgaagca
 822 K T K S L A Q Q L T R E A T Q A E I E A
 2641 gataggtctt atcagcacag tctccggctc ctggatttc当地 tgc当地 tcaaggagtc
 842 D R S Y Q H S L R L L D S V S P L Q G V
 2701 agtgtatcgt ctttc当地 ggaagaagca aagaggatca aacaaaaagc ggattcaactc
 862 S D Q S F Q V E E A K R I K Q K A D S L
 2761 tcaaggcctgg taaccaggca tatggatgag tcaagc当地 cacaaaaagaa tctggggaaac
 882 S S L V T R H M D E F K R T Q K N L G N
 2821 tgaaaagaag aagcacagca gctttacag aatggaaaaaa gtgggagaga gaaatcagat
 902 W K E E A Q Q L L Q N G K S G R E K S D
 2881 cagctgctt cccgtgc当地 tcttgc当地 aacccggcc aagaagcaact ggttatgggc
 922 Q L L S R A N L A K S R A Q E A L S M G
 2941 aatgccactt ttatgaagt tgagagcatc cttaaaaacc tcagagatc tgacccctgc当地
 942 N A T F Y E V E S I L K N L R E F D L Q
 3001 gtggacaaca gaaaaggcaga agctgaagaa gccatgaaga gacttc当地 catcagecc
 962 V D N R K A E A E E A M K R L S Y I S Q
 3061 aaggtttc当地 atgccactgca caagacccag caagcagaaaa gagccctggg gagcgctgct
 982 K V S D A S D K T Q Q A E R A L G S A A
 3121 gctgtatgc当地 agagggccaaa gaatggggcc gggggaggccc tggaaatc当地 cagttagatt
 1002 A D A Q R A K N G A G E A L E I S S E I

FIG 4C

(SEQ ID NO.:12 & 13)

3181 gaacaggaga ttgggagttc gaacttggaa gccaatgtga cagcagatgg agscctggcc
 1022 E Q E I G S L N L E A N V T A D G A I A
 3241 atggaaaaagg gactggcctc tctgaagagt gagatggaggg aagttggaaagg agagctggaa
 1042 M E K G L A S L K S E M R E V E G E L E
 3301 aggaaggagc tggagttga cacgaatatg gatgcagtag agatggtgat tacagaagcc
 1062 R K E L E F D T N M D A V Q M V I T E A
 3361 cagaagggtt ataccagagc caagaacgc ggggttacaa tccaaagacac actcaacaca
 1082 Q K V D T R A K N A G V T I Q D T L N I
 3421 tttagacggcc tcctgcatact gatggaccag ccttcctcgt tagatgaaga ggggttgttc
 1102 L D G L L H L M D Q. P L S V D E E G L V
 3481 ttactggagc agaagcttcc ccgagccaa gccccagatca acagccaaact gcggcccatg
 1122 L L E Q K L S R A K T Q I N S Q L R P M
 3541 atgtcagagc tggaaagagag ggcacgtcag cagaggggcc acctccattt gctggagaca
 1142 M S E L E E R A R Q Q R G H L H L L E T
 3601 agcatatgtt ggattctggc tgatgtgaa aacttggaa acattagggaa caaacctggc
 1162 S I D G I L A D V K N L E N I R D N L P
 3661 ccaggctgct acaataccca ggctttgag caacagtgaa gctgccataa atatttctca
 1182 P G C Y N T Q A L E Q Q *

3721 actgaggttc ttgggatata gatctcagg gtcgggagcc atgtcatgtg agtgggtggg
 3781 atggggacat ttgaacatgt ttaatgggt tgctcaggc aactgacctg acccccattcc
 3841 tgcattccatg gccagggtgg tgcatttttg caccataactc cttgttccct gatgtcgcc
 3901 atgaggcaga taggcactgg tggagaatg atcaaggatc tggaccccaa agatagactg
 3961 gatggaaaaga caaactgcac aggagatgt ttgcctcata atatgtgtaa gtggagtcct
 4021 ggaattttggc caagtgtgt tggatatacg tcaacttatt ctttgagtaa tggactaa
 4081 gggaaaaact tgactttgc ccaggcatga aattttccct aatgtcagaa cagatgtgca
 4141 cccagtccaca ctgtggccag taaaatacta ttgcctcata ttgttctctg caagttctt
 4201 getgatcaga ttccctctta ttacaaaccc agggtgtgaa catgttctcc attttcaagc
 4261 tggaaagaatg gggcgtgtt ggagtggaa cctgttaaggc aggcccattc agagctatgg
 4321 tgcattgtgg tgcctggccac ttcaaggc tggacccatgg catgacatcc ttttttttaa
 4381 tgatccatg gcaactttaga gattgtttt ttttttttca aatgtcatttcc agcaaaaggca
 4441 atgttggaa agtattttact ttttgcgtttt ctttttttca aatccatcc ttcgaacacc
 4501 tggaaagaggt aaaattctct agatttatta ttttttttca atcttctctc ttttttttcc
 4561 aaaaatgtg cgcatcaatg tattttatct cttcagctgg gtcacatcca tccctccatt
 4621 acccaataa agagaatgtt ctactcaca ttttttttca aatccatcc ttttttttca
 4681 catcccttcca tccatcttc catccattac ttttttttca aatccatcc ttttttttca
 4741 gagtacccatc ttttttttca aatccatcc ttttttttca aatccatcc ttttttttca
 4801 gagttgatttgc ttttttttca aatccatcc ttttttttca aatccatcc ttttttttca
 4861 ttgtttgtc acaagggtt ttttttttca aatccatcc ttttttttca aatccatcc
 4921 acagaacata ttttttttca aatccatcc ttttttttca aatccatcc ttttttttca
 4981 ctgggttggc cacatcttc ttttttttca aatccatcc ttttttttca aatccatcc
 5041 aacagactgt ttttttttca aatccatcc ttttttttca aatccatcc ttttttttca
 5101 caccttggct gggaaagacta ttttttttca aatccatcc ttttttttca aatccatcc
 5161 aagtgtttt aaataaaagaa ttttttttca aatccatcc ttttttttca aatccatcc

FIG 4D

(SEQ ID NO.:14 & 15)

3421 ttagacggcc tcctgcatct gatgggtatg tgaacccaca acccacacaacc ttccagcc
1102 L D G L L H L M G M *

3481 atgtccagg gctttgtcc agaacactca ctatacctag ccccagcaaa ggggagtctc
3541 agcttcctt aaggatatca gtaaatgtgc tttgtttcca ggcccagata actttcgca
3601 ggtcccccta catttactgg accctgttt accgttgcta agatgggtca ctgaacacct
3661 attgcacttg ggggtaaagg tctgtggcc aaagaacagg ttttatataag caacttcaca
3721 gaacacgaga cagcttggga atcctgtcaa agagtctggc ctggaccctg agaagccagt
3781 ggacagttt aagcagagga ataacatcac cactgtataat ttcagaaaga tcactagggc
3841 agccgagtgg aggaaagctt gaagaggggg ttagagagaa ggcaggtrga gactactaa
3901 gatattgtt aaataattga agagagaaat gacaggagcc tgctctaagg cagtagaaatg
3961 gtggctggga agatgtgaag gaagatttc ccagtctgtg aagtcaagaa tcacttgccg
4021 gcccgggtgtg gtggctcacg cctgtatcc tagcactttt ggagactgaa gcccgggtggat
4081 caccggaggt caggagttga agaccagcct ggccaacatg gtgaaaccct gtctctacta
4141 aaagtacaaa aattagctgg atgatggtgg tggcgccctg taattccagc tactcaggag
4201 tctgaggcag gagaatcgt tgaacccagg aggcgaggtt acagtgagcc aagattgcac
4261 cactgtctt ccagcctggg aacagagaga ctgcctaaaa aaaaaaaaaa aaaaaa //

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